

INTERNATIONAL FORUM ON GLOBAL ENERGY LANDSCAPE : OPPORTUNITIES AND CHALLENGES IN GLOBAL ENERGY TRANSITION

8.30am - 5.15pm

16 July 2019

Putrajaya Marriott Hotel

IFGE2019



Organiser




The Energy University

Supporter





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The main objective of this forum is to provide a platform for international experts and Malaysian energy stakeholders to discuss opportunities and challenges of the future global energy transition.

Besides that, it aims to address the various emerging issues in the energy sector brought by economic, regulatory and technical changes while ensuring sustainable development remains a priority.

ABOUT

**IFGE
2019**

Energy is the backbone of economy across the world. Industrial processes, public services, and urban cities greatly depend on energy supply affordability, reliability and sustainability. An unprecedented demand existed for cleaner energy supply and geopolitical landscape as the global energy demand gravitates toward Asia. Echoing these phenomena is the advent of Fourth Industrial Revolution that brings about disruptive technologies and new business models that have shaken the energy system's foundation.

Anticipating a more competitive energy market in the future, the energy industry players must continue to transform their operations in response to supply and demand changes, upgrade their technical knowledge, diversify their portfolios and establish more collaborative relationships with global partners. Furthermore, synergy among countries is essential to optimize energy resources and leverage the underlying transformational forces including capital, technology, know-how and infrastructure. An inclusive platform for action-oriented dialogue is vital to foster understanding of both systemic and country-level readiness for effective energy transition that incentivises leaders to accelerate energy transition within their respective countries and globally.

Debuting in 2016 under the flag "International Forum on Global Energy Landscape (IFGE)", the 3rd edition of IFGE this year will witness leading energy leaders engage in panel discussions and exchange views on the opportunities and challenges in the global energy transition. The forum aims to describe the imperatives of an effective energy transition, the dynamics of energy market development as well as the enabling policies. These are required to facilitate a common fact-base and understanding on energy market transition process, hence will accelerate improvement in efficiency of respective countries' energy systems.

Three plenary sessions will be conducted featuring discussion on long term outlook for global energy market and the role of renewable energy, key challenges in the process of adopting power market transition and liberalisation, as well as the role of natural gas and gas industries towards energy market reform. The discussion will build on insights on good practices from global peers and shed light on unexplored angles of opportunities to expedite the development of effective policies and public-private collaboration for an affordable, sustainable and secure energy future.

The "International Forum on Global Energy Landscape (IFGE 2019): Opportunities and Challenges in the Global Energy Transition" is sponsored by the Energy Commission and Tenaga Nasional Berhad.

PROGRAMME

International Forum on Global Energy Landscape: Opportunities and Challenges in Global Energy Transition (IFGE 2019)

TIME	16 JULY 2019 (TUESDAY)
08.30 am	Registration
09.00 am	Welcoming Remarks by YBhg. Dato' Prof. Ir. Dr. Kamal Nasharuddin bin Mustapha, Vice Chancellor of Universiti Tenaga Nasional (UNITEN)
09.15 am	Opening Speech by YB Mrs. Yeo Bee Yin, Minister of Energy, Science, Technology, Environment and Climate Change (MESTECC)
09.30 am	Keynote Address: "Opportunities and Challenges in Global Energy Transition" by Prof. Dr. Ken Koyama, Chair in Energy Economics of Energy Commission at UNITEN
10.15 am	Morning Break
10.30 am	Plenary Session 1: "Long term Outlook for Global Energy Market and the Role of Renewable Energy" In this session, the panellists will discuss outlook for long term global energy trend to highlight various scenarios for future global energy transition. The discussion will then focus on the roles, opportunities and challenges of renewable energy for improving energy security, mitigating climate change and providing direct and indirect economic benefits. SPEAKER: Ms. Yukari Yamashita, Director of Energy Data and Modelling Center (EDMC), Institute of Energy Economics, Japan (IEEJ) Panellists: 1. Mrs. Noor Afifah binti Abdul Razak, Deputy Secretary General (Energy) of Ministry of Energy, Science, Technology, Environment & Climate Change (MESTECC) 2. Ir. Dr. Sanjayan Velautham, Chief Executive Officer of Sustainable Energy Development Authority (SEDA) 3. Datuk Fazlur Rahman bin Zainuddin, Chief Strategy & Regulatory Officer of Tenaga Nasional Berhad (TNB) Moderator: YBhg. Tan Sri Dato' Academician Ir. (Dr.) Ts. Hj. Ahmad Zaidee bin Laidin, Board of Directors of UNITEN
11.45 am	Plenary Session 2: "Challenges of Power Market Transition and Liberalisation" This session will discuss the impact of energy transition to the business of power utilities. The panellists will deliberate on how the utilities are reinventing their business models to remain relevant in the future power market towards liberalization, as well as lessons learned from past experiences and challenges of global market reform. The panellists will also shed light on the impacts of large scale RE inflows into the competitive wholesale market, in a bid to illustrate how the energy industry and the government have responded to the challenges. SPEAKER: Prof. Dr. Peter R. Hartley, Professor of Economics of Rice University, USA Panellist: 1. YBhg. Dato' Abdul Razak bin Abdul Majid, Chief Executive Officer of Malaysia Programme Office for Power Electricity Reform Corporation (MyPOWER) 2. Electricity Generating Authority of Thailand (EGAT) 3. The Department of Energy, Philippines (DOE) Moderator: Mr. Abdul Razib bin Dawood, Acting Chief Executive Officer of Energy Commission

PROGRAMME

International Forum on Global Energy Landscape: Opportunities and Challenges in Global Energy Transition (IFGE 2019)

TIME	16 JULY 2019 (TUESDAY)
1.00 pm	Lunch Break
2.30 pm	<p>Plenary Session 3: “The Role of Gas in Global Energy Transition and Its Challenges in Sustainable Energy Future” This session will explore the roles of natural gas and gas industries in the context of low carbon energy transition as well as supply and demand dynamics in a competitive global energy market. The panellists will highlight past experiences and challenges of global gas market reform to provide guidance for Malaysian stakeholders.</p> <p>SPEAKER: Prof. Dr. Jonathan Stern, Director of Gas Research of Oxford Institute for Energy Studies (OIES),UK</p> <p>Panellists:</p> <ol style="list-style-type: none"> 1. Mr. Mohammad Zakhir Bin Yusof, Deputy Director (Upstream) of Energy Sector, Ministry of Economic Affairs (MEA) 2. Mr. Hazli Sham bin Kassim, President of Malaysian Gas Association (MGA) 3. Mr. Steven Arokiasamy, Chairman of Energy Management Committee of Federation of Malaysia Manufacturer (FMM) <p>Moderator: Assoc. Prof. Dr. Hj. Amanuddin bin Shamsuddin, Dean of College of Business Management & Accounting of UNITEN</p>
3.45 pm	Break
4.00 pm	<p>Wrap-up Session: “Opportunities and Challenges in Global Energy Transition and Its Implication to Malaysia” This session will summarise and deliberate the important points in global energy transition to provide useful insights and policy recommendations to Malaysian policy makers and industry players.</p> <p>Panellists:</p> <ol style="list-style-type: none"> 1. Ms. Yukari Yamashita, Director of Energy Data and Modelling Center (EDMC) of Institute of Energy Economics Japan (IEEJ) 2. Prof. Dr. Peter R. Hartley, Economics Professor of Rice University, USA 3. Prof. Dr. Jonathan Stern, Director of Gas Research of Oxford Institute for Energy Studies (OIES), UK 4. Mr. Abdul Razib bin Dawood, Acting Chief Executive Officer of Energy Commission <p>Moderator: Prof. Dr. Ken Koyama, Chair in Energy Economics of Energy Commission at UNITEN</p>
4.45 pm	Closing Remarks by YBhg. Datuk Ir. Ahmad Fauzi bin Hasan, Chairman of Energy Commission
5.15 pm	End

SPEAKERS

Prof. Dr. Ken Koyama

Chair in Energy Economics of Energy Commission at UNITEN



He is the Managing Director of the Institute of Energy Economics, Japan (IEEJ). He received his Bachelor and Master degrees in Economics from Tokyo's Waseda University, and his PhD from the University of Dundee with his thesis titled "Japan's Energy Strategies toward the Middle East". He joined IEEJ in 1986 and has held various positions within the Institute, such as Senior Economist, Head of the World Oil and Energy Group, as well as Senior Research Fellow in the Energy and Strategy Unit. Currently, he is the Chief Economist at IEEJ. Alongside his current position, Professor Koyama has also taught at the University of Tokyo's Graduate School of Public Policy since 2010. He is also currently the Chair in Energy Economics of Energy Commission at UNITEN since 7 December 2015.

Ms. Yukari Yamashita

Director of Energy Data and Modelling Center (EDMC)
Institute of Energy Economics, Japan (IEEJ)



She is a board member and the director of the Energy Data and Modelling Center (EDMC) at the Institute of Energy Economics, Japan (IEEJ). EDMC is involved in the quantitative and econometric analysis of issues relating to energy policy, energy demand and energy supply. Through its work, the IEEJ aims to aid the development of Japan's energy sector and formulation of the country's energy policy. Today, its research areas have expanded to include environmental issues and their implications to the global energy sector.

In addition to her role at the IEEJ, she serves on several government councils and committees related to energy, science and technology. She also leads several international programs focusing on energy efficiency and energy modelling. She is an independent director and a board member of a Japanese oil company. She is also the President-Elect of the International Association for Energy Economics (IAEE) for 2019 and will become the President in 2020.

SPEAKERS

Prof. Dr. Peter R. Hartley
Professor of Economics
Rice University, United States



He is the George and Cynthia Mitchell Professor of Economics at Rice University. He is also a Rice Scholar of Energy Economics at the Baker Institute. He has worked on energy economics issues for 35 years, focusing originally on electricity, but also including work on natural gas, oil, coal, nuclear and renewable energy. He wrote on reform of the electricity supply industry in Australia throughout the 1980s and early 1990s and advised the government of Victoria when it completed the acclaimed privatization and reform of the electricity industry in that state in 1989. Apart from energy and environmental economics, Hartley has published research on theoretical and applied issues in money and banking, business cycles and international finance. He worked for the Priorities Review Staff, and later the Economic Division, of the Prime Minister's Department in the Australian government. He joined Rice as an associate professor of economics in 1986 after serving as an assistant professor of economics at Princeton University from 1980 to 1986.

He completed an honours degree in mathematics and a master's degree in economics at The Australian National University. He received his PhD from the University of Chicago and was an Assistant Professor of Economics at Princeton University before joining Rice. Originally from Australia, he has also held visiting appointments at Monash University, Melbourne University, the Australian National University and the University of Western Australia.

SPEAKERS

Prof. Dr. Jonathan Stern

Director of Gas Research

Oxford Institute for Energy Studies (OIES), United Kingdom



He is a Distinguished Research Fellow of the Natural Gas Research Programme who founded the OIES Natural Gas Research Programme in 2003. He was Director until October 2011 and later became its Chairman and a Senior Research Fellow. He became a Distinguished Fellow in October 2016. Also an Honorary Professor at the Centre for Energy, Petroleum & Mineral Law & Policy, University of Dundee; Visiting Professor at the Centre for Environmental Policy, Imperial College London; Fellow of the Energy Delta Institute and a Distinguished Research Fellow of the Institute of Energy Economics, Japan (in Tokyo).

From 2011-2016 he was an EU Speaker for the EU–Russia Gas Advisory Council. He is the author and editor of several books, including: *Natural Gas in Asia: The Challenges of Growth in China, India, Japan and Korea*, the second edition of which was published by OUP in 2008; co-editor with Prof. Bassam Fattouh of *Natural Gas Markets in the Middle East and North Africa* (OUP, 2011); and editor of *The Pricing of Internationally Traded Gas* (OUP, 2012). In 2014, his publications included papers (co-authored with other members of the gas programme) ‘Reducing European Dependence on Russian Gas – Distinguishing Natural Gas Security from Geopolitics’ and ‘The Dynamics of a Liberalised European Gas Market: Determinants of Hub Prices and Roles and Risks of Major Players’. He is author of two chapters in: eds. Anne-Sophie Corbeau and David Ledesma, ‘LNG Markets in Transition: The Great Reconfiguration’, published by OIES and KAPSARC in 2016. He has published papers on: *Challenges to the Future of Gas: Unburnable or Unaffordable*, and *Narratives for Natural Gas in Decarbonising European Energy Markets* in 2017 and 2019. He is the editor of a new book on: *The Future of Gas in the Gulf: Continuity and Change*, which was published in June 2019. His areas of expertise includes natural gas issues worldwide: development, trade, liberalisation, regulation, security, utility business models, gas and decarbonisation.

PANELLISTS

Ir. Dr. Sanjayan Velautham

Chief Executive Officer
Sustainable Energy Development Authority (SEDA)



He was appointed as Chief Executive Officer of SEDA effective of 9th January 2019. He has more than 30 years of experience in the industry, international organisation, an academia and research institutes.

He is a professional engineer (P.Eng.) with a doctoral degree in Engineering and a Senior Member at the Institution of Engineers, Malaysia. He is also an Advisory Board Member for the Asia Pacific Energy Research Centre (APERC), Japan.

Prior to his present appointment he was the Executive Director of the ASEAN Centre for Energy in Indonesia. He had started his career at Tenaga Nasional Bhd. (TNB) in Malaysia within the Power Generations Division, including several years as an Assoc. Prof. at Universiti Teknologi Malaysia (UTM). He had moved to Singapore in 2008 initially as the Deputy Director with the Agency of Science, Technology and Research (A*STAR), and then with General Electric as Region Manager for the Power Generation Services business. He had also served as the National Project Manager for the United Nations Development Programme's (UNDP Malaysia) BioGen Project.

He has authored several publications in international journals/ books and subject modules particularly in the field of energy. His interest among others is to continue to engage in the strategy and policy research related to sustainable energy development within the region.

PANELLISTS

Dato' Abdul Razak bin Abdul Majid

Chief Executive Officer

Malaysia Programme Office for Power Electricity Reform Corporation (MyPOWER)



Dato' Abdul Razak bin Abdul Majid's career in the electricity supply industry, spans for over 40 years. He is currently helming MyPOWER Corporation, a special purpose company to undertake the largest transformation programme for the electricity industry under the programme MESI 2.0. The team he leads at MyPOWER has been given the mandate by Minister of Energy, Science and Technology, Environment and Climate Change to further transform the electricity supply industry into becoming a more resilient and future-ready sector.

His career experience recorded an earlier appointment as Head of MESI 1.0 (2010-2014), which was established to assess industry structural issues and deficiencies. The Reform Program worked on a set of initiative which subsequently initiated competitive bidding for power procurement, jointly facilitated incentive based regulatory framework and steered through the establishment of the Ring-fenced Single Buyer and System Operation entities. Some other initiatives are also being phased in.

Following the success on the MESI 1.0 Program, he was appointed as the chairman of Suruhanjaya Tenaga (Energy Commission). During the four years at Suruhanjaya Tenaga, he presided over a number of key initiatives for gas and electricity industry that saw the implementation of the IBR framework for both gas and electricity Third Party Access for the Gas Industry and the fellow through of the key reforms recommended under the MESI 1.0 Program. A true-blue executive in the power sector, Dato' Abdul Razak started his career with Lembaga Letrik Negara, now Tenaga Nasional Bhd (TNB), in 1973. Following successful posting in various positions within TNB, he retired as Senior Vice President of Corporate Affairs in 2009.

He graduated with a Degree in Electrical Engineering at Brighton University UK in 1973 and obtained his Master's Degree in Business Administration from Ohio University in 1995. For his service in the public sector, he has been conferred the Federal Awards of Johan Setia Mahkota and Kesatria Mangku Negara as well as Darjah Setia Pangkuan Negeri from his home state, Penang.

PANELLISTS

Mr. Hazli Sham bin Kassim

President

Malaysian Gas Association (MGA)



He is the current President of the Malaysian Gas Association, a non-profit organization comprising 150 members with mission to promote the advancement of a sustainable Malaysian gas industry through advocacy, communication and education.

He is also currently the Chief Strategic Liaison Officer, Strategic Liaison Office, at PETRONAS, the national oil company of Malaysia and listed in the Fortune 500. Strategic Liaison Office orchestrates and manages key engagements and issues resolution with stakeholders in the federal and state governments.

He holds a BSc in Petroleum Engineering from Texas A&M University, College Station, Texas, USA. He started his professional career in 1995 when he joined PETRONAS in Malaysia as a petroleum engineer. Since then, he has worked in several countries including the USA and Indonesia, holding several leading technical positions at PETRONAS, mostly in the upstream business, both onshore and offshore assignments.

Before returning to Malaysia in 2016, he was the Country Chairman, PETRONAS Indonesia. During his leadership there, PETRONAS achieved its inaugural first oil and first gas in Indonesia from its own operated blocks and he became the first board member of Indonesian Petroleum Association (IPA) representing PETRONAS (January 2016 – June 2016).

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PANELLISTS

Mr. Steven Arokiasamy

Chairman of Energy Management Committee
Federation of Malaysia Manufacturer (FMM)



He received his MBA from University of Southern Cross, Australia in 2002 and Diploma in Civil Engineering Technology from University of Technology Malaysia (UTM) in 1988. Steven is currently the Managing Director of Viacor Asia Sdn Bhd, a manufacturer of epoxy and polyurethane chemicals for flooring industry for the Asia Pacific market. He is also a Director at Smane Malaysia. His previous experiences included positions as Global Operations Director at BF Goodrich Malaysia and Marketing Manager, Asia Pacific at LNP Engineering Plastics, Malaysia. He was formerly a board member of Negeri Sembilan Investment Corporation.

Mr. Mohammad Zakhir bin Yusof

Deputy Director (Upstream) of Energy Sector
Ministry of Economic Affairs (MEA)



He is currently the Deputy Director (Upstream) at Energy Division, Ministry of Economic Affairs (MEA) since July 2018. Prior to his current position, he had spent many years of experiences serving the country through a number of public services since 2001. Previously, he was a Principal Assistant Secretary at Ministry of Transport, Principal Assistant Director at Jabatan Perkhidmatan Awam (JPA) and Principal Assistant Secretary at Ministry of Youth and Sports. In addition to that, he also served foreign affairs related area at Ministry of Foreign Affairs and Embassy of Malaysia in Peru and Laos.

He received his Bachelor of Economics from University of Missouri-St.Louis, U.S.A and Master of Economics at Universiti Putra Malaysia (UPM).

PANELLISTS

Datuk Fazlur Rahman bin Zainuddin
Chief Strategy & Regulatory Officer
Tenaga Nasional Berhad (TNB)



He is a former Chief Financial Officer of Tenaga Nasional for 6 years and currently holds the position of Chief Strategy and Regulatory Officer effective 1st August 2018 as part of job rotation in line with TNB's succession planning program. In his new role, his responsibilities include leading and driving overall business strategy under Reimagining TNB and enabling a stable regulatory environment.

Prior to joining TNB, he served as Chief Financial Officer of Naza Group. He has also served several prestigious companies such as PwC, Shell Malaysia and Telekom Malaysia in various financial management capacities and corporate roles. He is a Fellow of Association of Chartered Certified Accountants, United Kingdom and a Member of Malaysian Institute of Accountants.

Mrs. Noor Afifah binti Abdul Razak
Deputy Secretary General (Energy)

Ministry of Energy, Science, Technology, Environment & Climate Change (MESTECC)



She is currently the Deputy Secretary General (Energy) at the Ministry of Energy, Science, Technology, Environment & Climate Change (MESTECC). Prior to joining MESTECC, she has served the country through a number of in her 25 years of service. Previously, she was the Senior Under Secretary of Electricity Supply in MESTECC right after being a Division Secretary for Water Sector at Ministry of Energy, Green Technology and Water (KeTTHA).

She holds a Diploma in General Sciences, Institute Supérieur des Sciences & Techniques, St Quentin, France in 1990, before she proceeds and attained her BSc. in Chemistry in 1992 and MSc. in Chemistry in 1993. She successfully completed both of them at Université de Picardie, Amiens, France.

MODERATORS

YBhg. Tan Sri Dato' Academician Ir. (Dr.) Ts. Hj. Ahmad Zaidee bin Laidin

Board of Directors
Universiti Tenaga Nasional (UNITEN)



He was appointed as a member of Sustainable Energy Development Authority Malaysia with effect from 1st February 2015.

He holds a Master in Science in Technological Economies (Management & Industrial Science), University of Stirling and is a registered Professional Engineer with the Board of Engineers Malaysia. Career wise, he was an engineer in Lembaga Letrik Negara/Tenaga Nasional Berhad for 24 years. Subsequently, he was appointed by Universiti Teknologi MARA (UiTM) as a Director in 1994; Rector in 1996 and the first Vice-Chancellor in 1999.

YBhg. Tan Sri is also a Council Member of the Academy of Sciences Malaysia and a Board Member of Open University Malaysia and Meteor Learning Sdn Bhd. He is also Chairman and Director of Malay Education and Development Research Institute, an NGO. He also serves on the Board of UNITEN. He was awarded the Degree of Doctor of the University by University of Stirling, the Honorary Degree of Doctor of Technology by Oxford Brookes University, and the Honorary Doctor of Letters by the Manchester Metropolitan University, as well as Honorary Professor of Napier University, United Kingdom. He was also awarded the Degree of Honorary Doctorate in Electrical Engineering from UiTM.

MODERATORS

Mr. Abdul Razib bin Dawood
Acting Chief Executive Officer
Energy Commission



He is an engineer with twenty years' experience in the electricity supply industry, having worked both with Malaysia and Australia National Power Utility, Independent Power Producer (IPP), Transmission Network Service Provider (TNSP) and renewable energy consultant. He held numerous roles such as construction engineer, system planning engineer, project manager, technical advisor and power system study specialist.

Prior to the Chief Operating Officer position, he was with Energy Commission of Malaysia as the Head of Electricity Market Operation from October 2012 to August 2017. Then he was assigned by the Prime Minister's Department to head the Malaysia Nuclear Power Corporation (MNPC) as Chief Executive Officer. In April 2018 he was appointed COO of EC and in April 2019 he was appointed as Acting CEO of EC to manage overall daily operations activities of EC.

Assoc. Prof. Dr. Hj. Amanuddin bin Shamsuddin
Dean of College of Business Management & Accounting
Universiti Tenaga Nasional



He accumulates vast experiences from both industry and academia. He has served more than 15 years in one of the leading utility companies in Malaysia, Tenaga Nasional Berhad. He started his career in TNB in 1991 after completing his Bach. Degree from the University of Newcastle, New South Wales, Australia. In TNB, he served in various functions/departments such as credit control, loan management, treasury management, financial planning, state and regional accountant and many more. He was also involved in quality and productivity promotion for the company.

He is currently the Dean for College of Business Management and Accounting, UNITEN Sultan Haji Ahmad Shah Campus, Muadzam Shah. He is a Chartered Accountant of Malaysia, CA (M) of the Malaysian Institute of Accountants (MIA) since 2004, associate member of the Institute of Internal Auditors (IIA), Malaysian Chapter, Certified Trainer for Risk Management and the Certified Lead Assessor for the ISO 9000.

ORGANISING COMMITTEE

PATRONS

Dato' Prof. Ir. Dr. Kamal Nasharuddin Mustapha
(Vice Chancellor of UNITEN)
Abdul Razib Dawood
(Acting Chief Executing Officer of Energy Commission)

ADVISORS

Dr. Siti Indati Mustapa
(Director of Institute of Energy Policy and Research)
Kamarul Ariffin Ibrahim
(Director Strategic Planning and Communication of Energy Commission)

EVENT MANAGER / COORDINATOR

Dr. Hasmaizan Hassan
(Head of Government and Industry Relations of IEPR)

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SECRETARIAT

Protocol & Registration

Assoc. Prof. Dr. Zuraidah Ali
Norma Hassan
Hawa Shamsudin
Sunarti Abdullah
Dr. Hasmaizan Hassan
Dr. Noriza Mohd Saad
Dr. Amar Hisham Jaaffar
Dr. Muhammad Khairul Islam
Dr. Siti Fatimah Salleh
Waznatol Widad Mohamad Ishak
Asiyyah Sakiinah Dzulkefli

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Norma Hassan
Hawa Shamsudin
Dr. Zeittey Karmilla Kaman
Dr. Siti Fatimah Salleh
Sulaiha Ahmad

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Fadzlin Md. Yunus
Aznita Abdul Razak
Sunarti Abdullah
Nor Hidayah Bukhari
Nurullaidah Md Ali

Rapporteurs

Dr. Muhammad Khairul Islam
Dr. Siti Fatimah Salleh
Dr. Sujahangir Kabir Sarkar
Dr. Ayodele Bamidele Victor

ORGANISERS



Universiti Tenaga Nasional (UNITEN) is a private university with a Government Link University (GLU) status; wholly owned by Tenaga Nasional Berhad (TNB). Universiti Tenaga Nasional operates from two campuses; one main campus in Putrajaya and the other is in Bandar Muadzam Shah, Pahang.



IEPRe was launched on 11th August 2009 as part of the Universiti Tenaga Nasional's Strategic Transformation Initiative to spearhead research and consultancy activities in the area of Energy Economics, which would enable government and industry players make informed decisions on the industry and create an environment of growth and sustainability. IEPRe has received strong support mainly from TNB, the Energy Commission and Ministry of Energy, Science, Technology, Environment and Climate Change. One of IEPRe main focus is on directed research, post-graduate program, capacity building and sharing of industrial experience. IEPRe relies on its internal capacity to carry out academic research and consultancy projects in the research focused areas through collaboration with experts from other institutions and industries. IEPRe is supported by a well-known energy economist, which currently held by Prof. Dr. Ken Koyama.

SUPPORTERS



The Energy Commission (EC), a statutory body established under the Energy Commission Act 2001, is responsible for regulating the energy sector, specifically the electricity supply and piped gas supply industries in Peninsular Malaysia and Sabah.



TNB is the largest electricity utility in Malaysia. TNB's core business is providing electricity to the country's businesses, homes and industries throughout Peninsular Malaysia, Sabah and Labuan.

ACKNOWLEDGEMENT

The organising committee would like to acknowledge the support from the Energy Commission and Tenaga Nasional Berhad for generously funding this forum through the Chair in Energy Economics of Energy Commission at UNITEN.

Our utmost appreciation goes to UNITEN's Management Team for their assistance in making this event possible through the unwavering support by the respective business units.

Furthermore, a special thank you to our staff at Institute of Energy Policy and Research (IEPRE) for all their hard work and dedication in ensuring the success of this forum from the very beginning till the end.

We hope your participation in this forum will support in exploring new ideas, analysing challenges, identifying solution tools, promoting expertise as well as forming networking research and work activities. We trust that you will have a stimulating and interesting discussion and wish you a productive and enjoyable forum.

Last but not least, we would like to extend our sincere gratitude to all speakers, panellists, moderators and participants who have helped us directly or indirectly during the execution of this auspicious event.

Dato' Prof. Ir. Dr. Kamal Nasharuddin Bin Mustapha
Patron

INTERNATIONAL FORUM ON GLOBAL ENERGY LANDSCAPE: OPPORTUNITIES AND CHALLENGES
IN GLOBAL ENERGY TRANSITION (IFGE 2019)

A complex network diagram with numerous nodes of varying sizes and shades of gray, connected by thin lines, forming a web-like structure across the entire page.

NOTES

IFGE 2019

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NOTES

IFGE 2019

2019

January '19

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April '19

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July '19

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August '19

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September '19

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October '19

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November '19

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December '19

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2020

January '20

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

February '20

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

March '20

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

April '20

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

May '20

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

June '20

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

July '20

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

August '20

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

September '20

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

October '20

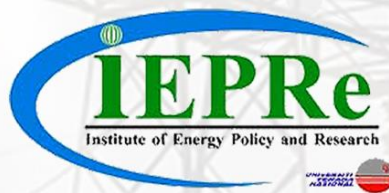
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

November '20

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

December '20

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31



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